Integrated Technical Architecture Management
Release 1.0
56.1.2 Technical Architecture Operations Solution

| Created By: Johney Tam | Created On: 05/01//01 | Version: 1.0 | Page 1 of 9 |
| Updated By: Idoya Oscariz | Updated On: 07/25/01 | Status: Final | |

56.1.2 Technical Architecture Operations Solution

Contents:

1.0 Introduction

The purpose of this document is to define the approach for providing the capability to sustain the Integrated Architecture Release 1.0 (ITA R1.0), at the Office of Student Financial Assistance (SFA) within the U.S. Department of Education. The Technical Architecture Operations Solutions specifies the Integrated Technical Architecture Management services that will be provided within the scope of Task Order 56 and establishes the framework for the design and implementation of processes, operating procedures, and infrastructure to provide these services. This document is intended to be a living document and will be updated to reflect changing needs, new application releases with added functionality, inclusion of other SFA applications, and operational experience over the life of the applications.

Scope and Objective

The scope of this task order is to provide a single Modernization Partner point of coordination for IT Services and the VDC and to provide the capability to sustain the Integrated Technical Architecture (ITA) Release 1.0. The support capability will focus solely on the ITA and include logging, tracking and ensuring resolution of technical problems, user support (i.e. providing assistance to developers, applications maintenance, VDC personnel and SFA CIO employees by answering questions about the architecture), break/fix (i.e. diagnosing and resolving deficiencies in the Architecture that prevent it from meeting existing requirements) and minor enhancements (i.e. analyzing and implementing minor requirements changes).

System operations of the production environment at the Virtual Data Center (VDC) is excluded from this task order, since this work is currently being performed by Computer Sciences Corporation (CSC) under a separate contract with SFA.

**Integrated Technical Architecture Management
Release 1.0**
56.1.2 Technical Architecture Operations Solution

Created By: Johney Tam	Created On: 05/01//01	Version: 1.0	Page 2 of 9
Updated By: Idoya Oscariz	Updated On: 07/25/01	Status: Final	

This document defines Accenture's approach to supporting the Integrated Technical Architecture. It delineates the services to be provided and establishes the framework to be used to deliver these services.

2.0 Roles and Responsibilities

The purpose of this section is to provide a high level understanding of the organization required to run the Integrated Technical Architecture Management Team and sustain long term operations of Integrated Technical Architecture Release 1.0 (ITA R1.0).   It includes a description of the guiding principles for building the Integrated Technical Architecture Management Team, a detailed organization structure, descriptions for each function within the organization and a staffing plan for Integrated Technical Architecture Release 1.0.

Guiding Principles
The following guiding principles were used to drive the design of the ITA R. 1.0:

❑ Meet Integrated Technical Architecture Release 1.0 application management needs while ensuring scalability to include subsequent releases and support for additional applications. Current applications using ITA R1.0 include Schools Portals/IFAP, Intranet and CFO DataMart.

❑ Ensure a customer focus by providing a single point of accountability for the architecture components.

❑ Provide a single entry point to receive and resolve user problems and to receive and document application enhancement requests.

❑ Work with partners [i.e., CSC and 3rd party vendors (Interwoven, Autonomy, Microstrategy, IBM etc.)] to integrate processes and procedures to support the operations.

Integrated Technical Architecture Release 1.0 Customers, Users, Partners and Suppliers
Customers
❑ **SFA CIO IT Services** has organizational responsibility for the Integrated Technical Architecture Release 1.0. In this role, the IT Services Deputy CIO serves as the business sponsor for the Integrated Technical Architecture Release 1.0 and provides strategic direction to the Integrated Technical Architecture Management Team.

Users
❑ **Application Development Teams** for applications that are planned to be deployed on the Integrated Technical Architecture Release 1.0.

❑ **Application Maintenance Teams** for applications that are currently supported by the Integrated Technical Architecture Release 1.0.

Partners
❑ **The SFA Virtual Data Center operations contractor, Computer Science Corporation** which provides data center support, maintains the production, development and test infrastructure, provides backup and disaster recovery, and provides security.

Integrated Technical Architecture Management
Release 1.0
56.1.2 Technical Architecture Operations Solution

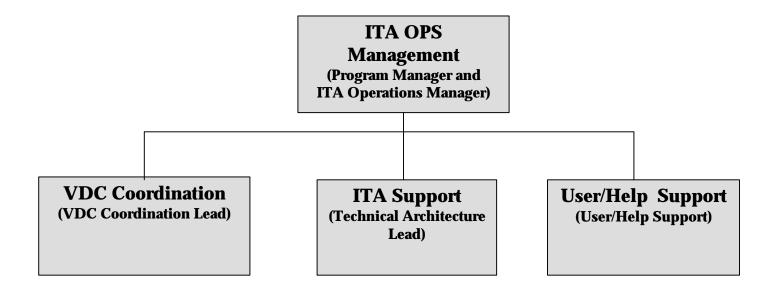|			
Created By: Johney Tam	Created On: 05/01//01	Version: 1.0	Page 3 of 9
Updated By: Idoya Oscariz	Updated On: 07/25/01	Status: Final	

Suppliers
❑ **Third Party Vendors, Interwoven, Autonomy, IBM, Microstrategy** whose products comprise the ITA Release 1**.** These vendors will provide the Integrated Technical Architecture Management Team with product specific support.

Integrated Technical Architecture Release 1.0 Organization Design
The functional organization model depicted below outlines all functions required to support the Integrated Technical Architecture Release 1 at SFA. The Functions describe a role that a person will fulfill but do not correspond to a full time position.

Technical Architecture Management Functional Organization Model

ITA OPS
Management
(Program Manager and
ITA Operations Manager)

VDC Coordination
(VDC Coordination Lead)

ITA Support
(Technical Architecture
Lead)

User/Help Support
(User/Help Support)

Integrated Technical Architecture Management
Release 1.0
56.1.2 Technical Architecture Operations Solutions

Created By: Johney Tam	Created On: 03/22/01	Version: 1.0	Page 4 of 9
Updated By: Idoya Oscariz	Updated On: 07/25/01	Status: Final	

Functional Descriptions

Outlined below are functional descriptions for each organizational area within the Integrated Technical Architecture Release 1.0. Key responsibilities are described for each function.

Program Manager
The program manager is responsible for ensuring that the Applications Management organization provides enterprise-wide capability to operate SFA applications such that the business value originally intended to be derived from each application is fully realized.
- Support the business sponsor to manage the development of business cases for major application enhancements related to ITA R.1.
- Ensure consistent policies, procedures, standards and guidelines across SFA applications particularly related to the VDC
- Manage the measurement and reporting of performance metrics across SFA Applications

ITA Operations Manager
- Establish and manage governance for all applications
- Review and prioritize minor enhancement requests
- Establish, measure and report on performance metrics
- Establish/manage formal agreements
- Authorize, prioritize and assign work
- Establish and manage releases
- Adhere to SFA configuration management policies

ITA R.1 Support – Technical Architecture Lead
Provide maintenance support for the ITA Release 1.0, running on Sun E3500 and E220 servers in support of the IFAP/Schools Portal, Intranet and CFO Data Mart applications. The support functions include:

- Support Development/System Test/Production Environments
- Conduct daily monitoring and maintenance of Integrated Technical Architecture R.1
- Conduct performance tuning of Integrated Technical Architecture Release R.1
- Perform limited System Administration tasks
- Perform non-intrusive monitoring (functionality) & problem identification
- Conduct application-specific modifications to core components
- Analyze and implement minor requirements changes.
- Facilitate weekly coordination session with IT Services, the VDC and application maintenance teams maintaining a list of open action items and issues.

VDC Coordination – VDC Coordination Lead
Provide a single point of coordination among IT Services, the VDC and all application development teams that are part of the SFA Modernization effort. The coordination functions include:

Integrated Technical Architecture Management
Release 1.0
56.1.2 Technical Architecture Operations Solutions

| Created By: Johney Tam | Created On: 03/22/01 | Version: 1.0 | Page 5 of 9 |
| Updated By: Idoya Oscariz | Updated On: 07/25/01 | Status: Final | |

- Track all Modernization IT Projects and their technical environments requirements
- Facilitate weekly coordination sessions with IT Services, the VDC, application development teams, maintaining a list of open action items and issues
- Maintain a Road Map to the VDC to provide Modernization application development teams with information, forms and templates that are required to the successful delivery of an application to production in the VDC on time.

User/Help Desk support
- Provide knowledge transfer to VDC, applications maintenance and developer personnel about the Integrated Technical Infrastructure Release 1.
- Log, track, and ensure resolution of technical problems.

Integrated Technical Architecture Management Release 1.0 Staffing Plan

The Integrated Technical Architecture Release 1.0 Technical Architecture Management organization will consists of five personnel:

- Program Manager – Phill Thomas

- Integrated Technical Architecture Manager – Thomas Schweikert

- VDC Coordination Lead – Idoya Oscariz

- Technical Architecture Technical Lead – Johney Tam

- Help Desk Support - Mark Mandrella

- Subject Matter Experts (SME) support as needed from 3rd party vendors.

3.0 Few Critical Processes
The purpose of this section is to provide a high level understanding of two of the most critical processes required to run the Technical Architecture Release 1:   Request Management and Production Environment Support.

Request Management
User facing process used to resolve a request.

> **Serve User**- Users will call the ITA Management Help Desk or send a message to the Help Desk mailbox. The help desk support will log and track all requests in a request database tracking tool. Simple requests (e.g. answering a question) will be resolved by the help desk support; more complex requests will be prioritized and forwarded to the corresponding team member. At the time of the request, the service requester will be given a ticket number. The service requester will be able get the status of the request at all times.
>
> Requests that do not involve a change to the application will be estimated and approved to implement the change obtained. Approved requests will be scheduled for implementation and

Integrated Technical Architecture Management
Release 1.0
56.1.2 Technical Architecture Operations Solutions

Created By: Johney Tam	Created On: 03/22/01	Version: 1.0	Page 6 of 9
Updated By: Idoya Oscariz	Updated On: 07/25/01	Status: Final	

assigned to a team member. If necessary, third party (e.g. IBM, Interwoven, Autonomy) support will be obtained to help resolve the request. Once a request has been resolved, the ITA Management Help Desk will inform the service requester, close the service request and collect service metrics.

Escalate Request Issues–The Integrated Technical Architecture Management team operates under a Service Level Agreement with its customers to be distributed to all parties involved. The SLA will include the means available to request support services from the ITA Management team and how to escalate an issue due to overdue resolution or change in priority.

Production Environment Support

This includes activities for monitoring the performance and availability of the applications and architecture, as well as resolving issues. Daily activities include: navigating to the applications via the URL to ensure that the sites are up; testing search capabilities on the IFAP and Schools Portal sites; testing sign-in functionality on the Schools Portal; resolution of outstanding issues based on priority. Further daily activities include monitoring the backend of the architecture by logging onto the remote production servers and running queries to ensure that the essential server processes are running to support the applications.

Any issues discovered during the monitoring of the sites will be logged and tracked in the Technical Architecture Management Database. These issues will be communicated to the ITA Operations Manager and worked on by the Technical Architecture Management Team.

Integrated Technical Architecture Management
Release 1.0
56.1.2 Technical Architecture Operations Solutions

Created By: Johney Tam	Created On: 03/22/01	Version: 1.0	Page 7 of 9
Updated By: Idoya Oscariz	Updated On: 07/25/01	Status: Final	

4.0 Architecture Management Service Targets

This section establishes the measurements and targets for the services provided to SFA by the Technical Architecture Management group. These targets are referred to as Service Targets and were baselined after the first six months of operations, beginning 12/01/00. The Service Targets have been reviewed and adjusted based on the trends identified in the previous six months of measurements.

Definitions

The following are briefly described below to help the reader understand the Service Targets that are outlined in section Service Targets.

Priority Levels:

High	Requests or issues deemed to be business-critical to one or more of the channels. The application or a portion of the application relating to the request or issue is not able to be accessed or used until this particular request or issue is resolved.
Medium	Requests or issues that are essential but not business-critical. The application or portion of the application relating to the request or issue can be accessed and used, but the functionality is somehow impaired.
Low	All other requests or issues.

Status Codes:
The following status codes will be associated with each request.

Open	Request has been received and opened by the Help Desk
Assigned	Help Desk has assigned the request to the Technical Architecture Management group
Acknowledged	Technical Architecture Management group has acknowledged receipt of request
Resolved	Request is resolved in the eyes of the Technical Architecture Management group
Closed	Help Desk informed requestor of resolution and closed the request after receiving requestor approval

Service Targets

The Technical Architecture Management group will measure and report performance based on the following Service Targets.

Integrated Technical Architecture Management
Release 1.0
56.1.2 Technical Architecture Operations Solutions

Created By: Johney Tam	Created On: 03/22/01	Version: 1.0	Page 8 of 9
Updated By: Idoya Oscariz	Updated On: 07/25/01	Status: Final	

Production Architecture Availability		
Service Item	**How Measured?**	**Service Target**
Production Architecture uptime, which is based on the following architecture components: - Interwoven - Autonomy - Oracle - IBM WebSphere - Informatica - IBM HTTP Server - Microstrategy - IBM eNetwork Dispatcher	VDC tools, Mod Partner Help Desk calls, and Sitescope will measure the availability of the architecture components	99% or greater availability 24 hours a day, 7 days a week, with an optional maintenance window from 9 pm to 1 am Saturdays and Sundays ***(VDC outages, application outages, as well as outages beyond the control of the Technical Architecture Group are not included). [1]

Customer Satisfaction			
Service Item	**How Measured?**	**Service Target**	
Response Time	Elapsed time from the initial notification of the request from Help Desk to acknowledgement of request by the Technical Architecture Management group	High Priority	90% responded to within 4 business hours or less.
		Medium Priority	90% responded to within 6 business hours or less.
		Low Priority	90% responded to within 8 business hours or less.
Service Reporting	Timely delivery of monthly service reports	Service Report delivered by the 7th calendar day of the following month	

---

[1] Availability will be calculated as follows: total hours available per month
                                                    total hours per month-VDC outages- maintenance window

Integrated Technical Architecture Management
Release 1.0
56.1.2 Technical Architecture Operations Solutions

| Created By: Johney Tam | Created On: 03/22/01 | Version: 1.0 | Page 9 of 9 |
| Updated By: Idoya Oscariz | Updated On: 07/25/01 | Status: Final | |

Quality		
Service Item	**How Measured?**	**Service Target**
Quality of resolutions.	Actions taken by help desk are correct	90% of all actions taken by help desk solve the problem first time. (Status of all requests, including user acceptance, are maintained in the database tracking tool)

Throughput		
Help Desk Metrics	**What Measured?**	**Estimated Volume**
Request Volumes	Number of Requests Received/ Resolved per Month, sorted by: Priority Request Type Requester	15 Requests/Month Note: demand for service in a particular month may vary substantially.

5.0   VDC Road Map

The VDC RoadMap (Attachment A) defines the steps necessary to move a project from the pre IRB stages to production with all the information required by IT Services and the VDC. The VDC RoadMap will be posted on the SFA Intranet (SFANet) under the CIO section to make it available to all SFA employees. It will also be posted on the shared drive of the Accenture network for Accenture teams who do not have access to the EDLan. The VDC Road Map is intended to be a living document and will be updated to reflect changing needs. Every time a modification is included, a new version number will reflect the change.   A matrix describing the identified steps and the forms associated with each of them (attached) will also be part of this deliverable.